

What is claimed is

1           1. A compact self-ballasted fluorescent lamp,  
2 comprising:

3           an arc tube including a glass tube at least partially  
4 bent, and electrodes sealed at both ends of the glass tube,  
5 each electrode including a filament coil; and

6           a holder having a pair of insertion openings formed  
7 therein, and holding the arc tube by fixing the ends of the  
8 glass tube inserted through the insertion openings,

9           wherein the ends of the glass tube are inserted to such  
10 positions that enable each filament coil to be positioned  
11 within the holder, and a minimum distance L1, in an insertion  
12 direction of the ends of the glass tube, between each filament  
13 coil and an edge of corresponding one of the insertion openings  
14 is in a range of 0 to 10 mm inclusive.

1           2. The compact self-ballasted fluorescent lamp of Claim  
2 1, wherein

3           mercury is singly enclosed in the glass tube, and  
4           an inner diameter of the glass tube is in a range of  
5 5 to 9 mm inclusive.

1           3. The compact self-ballasted fluorescent lamp of Claim  
2 1, further comprising

3           a globe covering the arc tube,  
4           wherein the arc tube is thermally connected to the globe  
5       via a heat conductive medium, at a coolest position of the  
6       arc tube during lighting, or a position in a vicinity of the  
7       coolest position.

1           4. The compact self-ballasted fluorescent lamp of Claim  
2       1, wherein

3           the arc tube has a double-spiral construction in which  
4       the glass tube is wound from a middle to both ends thereof  
5       around one axis.

1           5. The compact self-ballasted fluorescent lamp of Claim  
2       1, wherein

3           an amount of 2 to 5 mg inclusive of mercury is enclosed  
4       in the glass tube.

1           6. The compact self-ballasted fluorescent lamp of Claim  
2       4, wherein

3           a pitch of (a) each of both end parts of the glass tube  
4       and (b) an adjacent spiral part in a direction of the axis  
5       is larger than a pitch of other adjacent spiral parts, to  
6       widen a gap between each end part and the adjacent spiral  
7       part.

1           7. The compact self-ballasted fluorescent lamp of Claim  
2   5, wherein  
3           a winding pitch of the glass tube is changed to enlarge  
4   at such a position back from each end by 60 to 120° inclusive  
5   with respect to the axis, as viewed in the direction of the  
6   axis.

1           8. The compact self-ballasted fluorescent lamp of Claim  
2   5, wherein  
3           a gap between the other adjacent spiral parts is in a  
4   range of 1 to 3 mm inclusive, and  
5           a distance between (a) a first point that is on each  
6   end and (b) a second point that faces the first point and  
7   that is on an outer surface of an adjacent spiral part in  
8   the direction of the axis, is in a range of 3 to 6 mm inclusive.

1           9. The compact self-ballasted fluorescent lamp of Claim  
2   4, wherein  
3           an annular outer diameter of the arc tube with the  
4   double-spiral construction is in a range of 30 to 40 mm  
5   inclusive.

1           10. The compact self-ballasted fluorescent lamp of Claim  
2   3, wherein  
3           the holding member is in a cylindrical shape and has

4 an end wall where the insertion openings are formed,  
5 the compact self-ballasted fluorescent lamp further  
6 comprises a case that is fit to cover a circumferential wall  
7 of the holding member, and  
8 the globe is fixed in a state where an opening end thereof  
9 is fit in a gap formed between the circumferential wall of  
10 the holding member and the case.